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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,787	10/24/2003	Schat Sutardja	MP0400	2332
26703 7590 07/23/2009 HARNESS, DICKEY & PIERCE P.L.C. 5445 CORPORATE DRIVE SUITE 200 TROY, MI 48098				
EXAMINER				
PATEL, RAJNIKANT B				
ART UNIT		PAPER NUMBER		
2838				
MAIL DATE		DELIVERY MODE		
07/23/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,787

Applicant(s)

SUTARDJA, SEHAT

Examiner

RAJNIKANT B. PATEL

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23, 75-97, 155-172, 187, 188 and 240-243 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 155-172 is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-15, 19-23, 75-79, 83-87 and 93-97 is/are rejected.
- 7) ☒ Claim(s) 6-8, 16-18, 81, 82, 88-92, 187, 188 and 240-243 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the appeal brief filed on 4 May 2009, PROSECUTION IS HEREBY REOPENED. New non-final office action set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Jayprakash N Gandhi/

Supervisory Patent Examiner, Art Unit 2835.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 9-15, 19-23 and 75-79, 83-87, 93-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong (U.S. Patent # 6,084,790) in combinations with Albrecht et al. (U.S. Patent # 5,654,881) and Naito et al. (U.S. Patent # 6,282,103).

Wong discloses claimed subject matters a coupled inductor regulator (1 and 5-13), including at least two conduction switches (figure 5, item P2(1-N)), at least two inductors (figure 5, item L1-L2) wound on a common core (column 8, line 1-20), at least two freewheeling switches (figure 5, item P1(1) and P2(2) and a duty cycle 50% (column 9, line 30-60). However Wong does not disclose the technique for the inductor having a polarity such that DC currents in the inductors cancel each other, a buck-boost configuration, a duty cycle of approximately 50% and the inductors having a coefficient of coupling approximately equal to one. Albrecht et al. teaches the utilization of the similar technique for the inductor having a polarity such that DC currents in the inductors cancel each other, a buck configuration, a duty cycle of approximately 50% (figure 1, item 14 and column 2, line 60-70 and column 3-4, line 1-65) and Naito et al. teaches the utilization of the similar technique for and the inductors having a coefficient of coupling approximately equal to one (column 3, line 1-65 and figure 3, item 40). It would have been obvious one having ordinary skill in the art at the time the invention was made to modify Wong's power device by utilizing the technique taught by Albrecht

et al. and Naito et al. for the purpose improving the efficiency and power factor of the power supply.

Allowable Subject Matter

4. Claims 155-172 are allowed.
5. Claims 6-8, 16-18, 81-82, 88-92, 187-188 and 240-243 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJNIKANT B. PATEL whose telephone number is (571)272-2082. The examiner can normally be reached on M-Th 7-5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm E. Ullah can be reached on 571-272-2082. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RAJNIKANT B. PATEL/
Primary Examiner, Art Unit 2838
